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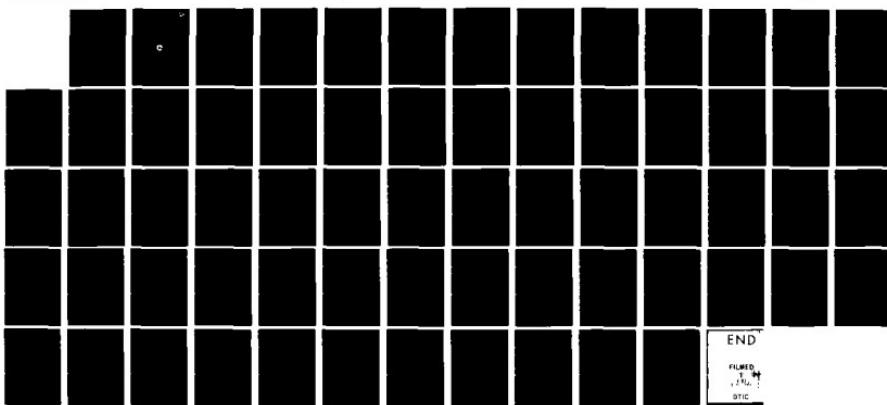
SURFACE DRIFTER STUDY - BERUFORT SEA ALASKA(U) COAST  
GUARD RESEARCH AND DEVELOPMENT CENTER, GROTON CT  
I M LISSAUER ET AL. JUL 82 CGR/DC-14/82 USCG-D-33-82

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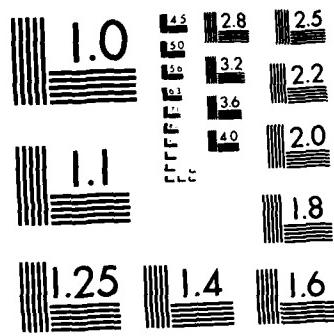
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SURFACE DRIFTER STUDY - BEAUFORT SEA, ALASKA

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## Technical Report Documentation Page

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16. Abstract  Surface drifters were released in the Beaufort Sea near Prudhoe Bay, Alaska for two years (1979-82). The releases were made under the shorefast ice just prior to summer breakup of the ice and in leads in the pack ice. The drifter recoveries indicate that the winds play a significant role in the surface circulation during the open water season. A significant number of drifters beached "onshore" of their release sites. "Preferred" beaching areas are identified from the drifter recoveries. All these results indicate the strong possibility that oil released offshore in the Beaufort Sea will impact the North Alaska Coast.			
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## 1.0 INTRODUCTION

A major area for oil exploration in the United States is the Beaufort Sea along the North Slope of Alaska. The estimated reserves on the North Slope and under the continental shelves of Alaska are potentially the largest untapped petroleum sources in North America. Various estimates of recoverable reserves (including the MacKenzie Bay area and the Canadian Archipelago) range up to 190 billion barrels of oil and 31 trillion cubic meters of gas.

Arctic oil spills could originate from any of several possible sources which have been identified as major threats. The most serious threat arises from the possibility of a well blowout. While it is difficult to estimate the magnitude of such a spill, a spill of hundreds of thousands of barrels is not unreasonable. Another possible source of an oil spill would be from tankers transporting crude oil from the North Slope to refineries in other states. Such an alternative appears to be both economically and technically feasible. With increased discoveries and production of oil expected to surpass the capacity of the pipeline from Prudhoe Bay to Valdez, the marine alternative to oil transport will take on added significance in the mid 1980's. A third source for an oil spill arises from the tankers which will be used to supply the North Slope area with refined petroleum products. The track these ships would take carries them through sometimes treacherous and ice-infested waters; the possibility of an accident with a resulting oil spill must be seriously considered.

Response to an oil spill in the Arctic is likely to be much slower than that of a similar situation in the temperate region, because of the remoteness of the area and its severe climate. In addition, it is possible that oil will be spilled under ice, or be covered with snow if it is spilled on the ice, making it difficult to locate the boundaries of the spill. In the face of these unique problems presented by an oil spill in the Arctic environment, accurate prediction of the extent and subsequent movement of an oil spill is vital to any cleanup effort.

The Coast Guard has sponsored research and field tests in attempting to define mechanisms of oil spreading in the Arctic environment. The WEBSEC (Western Beaufort Sea Ecological Cruise) studies of 1970-1973 have defined some features of the general oceanography of the North Slope continental shelf. Theoretical models, as yet untested, have been developed which address spreading on and under a solid ice cover and in open water (Matthews, 1981b, Free, et al. 1981). In addition, the Alaskan Outer Continental Shelf (OCS) environmental studies program of the Bureau of Land Management (BLM) has and is acquiring new information on the coastal waters of Alaska and the possible dispersion of oil in these environments. However, there are large gaps in our understanding of the Arctic environment, particularly in the area of surface currents and ice drift data.

## 2.0 OBJECTIVE

The United States Coast Guard's Office of Research and Development gave its Research and Development Center the specific responsibility to study oil/ice interaction phenomena and to provide guidance in defining appropriate spill response methods. An objective of the oil spill response program is the development of methods for predicting the movement of oil spills in ice-infested areas. The methods to be developed must account for the dynamics

of pack ice, and shear zones associated with the pack ice. Investigations were required to determine the factors that cause oil spill transport and the rates at which the spill changes physically and chemically with time.

Therefore, the Coast Guard R&D Center commenced a research project to develop methods for predicting the movement of oil spills in Arctic waters. One investigation undertaken was a drifter study to determine the net surface circulation in the nearshore region of the Southern Beaufort Sea between Point Barrow and the Canadian border.

### 3.0 PROCEDURE

Surface drifters have been used successfully in temperate waters to acquire useful data on surface drift (Paskausky and Murphy, 1976; Conomos, 1974). Similar studies in the Beaufort Sea were less successful because of low rates of return. Hufford, et al. (1976) documents a U.S. Geological Survey experiment where the rate of return for 4200 surface drifters was only 1.8%. Later drifter studies showed greater percentages of return because of expanded activities on the North Slope, however, they were still low in comparison to similar studies in temperate areas. Drifters for this study were released in 1979 and 1980. During 18-22 May 1979 1500 drifters were released under the ice, and during 28-31 March 1980 2000 drifters were released under the ice. The field party cut holes in the ice and forced the drifters under the ice. The release sites for 1979 and 1980 are shown in Figures 1 and 2. BP indicates the line of stations from Beechey Point seaward, SS is the line of stations in the Stefansson Sound area, north of Tigvariak Island. In addition to the under-ice releases a Coast Guard field party released drifters in open water leads during 1979 and 1980. Five-hundred-fifty drifters were released on 12 July 1979 from five stations north of the barrier islands. These are shown as CG 1-5 on Figure 1. On 7 July 1980 500 drifters were released in groups of 100 on a line running north of Reindeer Island (CG 1-5 on Figure 2). The first group of 100 drifters was released 5 miles north of the island and subsequent groups released at intervals of 5 miles from that point.

In this study, Woodhead-type surface drifters were used to determine the surface drift. They consist of a yellow plastic disc (18 cm diameter) with a 55 cm long stem attached through the center of the disc. Both the disc and the stem have slight positive buoyancy. The stem acts as a rudder and causes the drifter to float mostly submerged, rather than on the surface where the drifter could become airborne or be wind blown. The disc is stamped with a serial number and a legend with a promise of a \$1.00 reward upon the return of information regarding the time and location of discovery.

## 4.0 RESULTS

Drifter recoveries began in the summer after the ice broke up and began moving. During breakup, the drifters released under the ice entered the surface flow field and moved in the mixed ice and open water environment. This part of the experiment was intended to simulate the movement of oil which had been trapped on or in ice. In the Coast Guard release the drifters moved in an open water environment. Table 1 summarizes the drifter release and recovery data.

TABLE 1  
DRIFTER RELEASE AND RECOVERY DATA

<u>Date Released</u>	<u>Number Released</u>	<u>Number Recovered</u>	<u>Percent Recovered</u>
18-22 May 1979 (under ice)	1500	168	11.20
28-31 March 1980 (under ice)	2000	239	11.95
12 July 1979 (in leads)	550	9	1.64
7 July 1980 (in leads)	500	38	7.60
TOTAL ALL RELEASES	4550	454	9.98

Directional movement and drifter speed are listed in Appendices A and B. Table 2 is an analysis and summary of the drifter data contained in the appendices. Onshore for Table 2 has been arbitrarily set as any shore recovery 10 kilometers either side of the first Beechey Point (BP) and Stefansson Sound (SS) release stations (Figure 1). This computation was not done for the offshore CG stations.

The results of the drifter movements suggest that the drifters respond primarily to wind-driven surface water movement during open water conditions. The combined drifter returns show 334 (74%) were found to the west of their release points indicating a predominant easterly wind direction. This dominance of easterly winds has been well documented by Hufford, et al., 1976. Even though easterly winds dominate, causing a majority of the drifters to move west, there is still some significant movement to the east of release stations. Table 3 shows the maximum eastward and westward movement of drifters from each of the four transects of 1979 and 1980 as well as the CG release sites for 1979 and 1980. Even individual release sites can exhibit extreme dispersion in the movement of drifters released at these points. For example, from the released drifters at station BP-8 (1980), one drifter was found 122 kilometers west of the release site, and another was found 129 kilometers east of the release site.

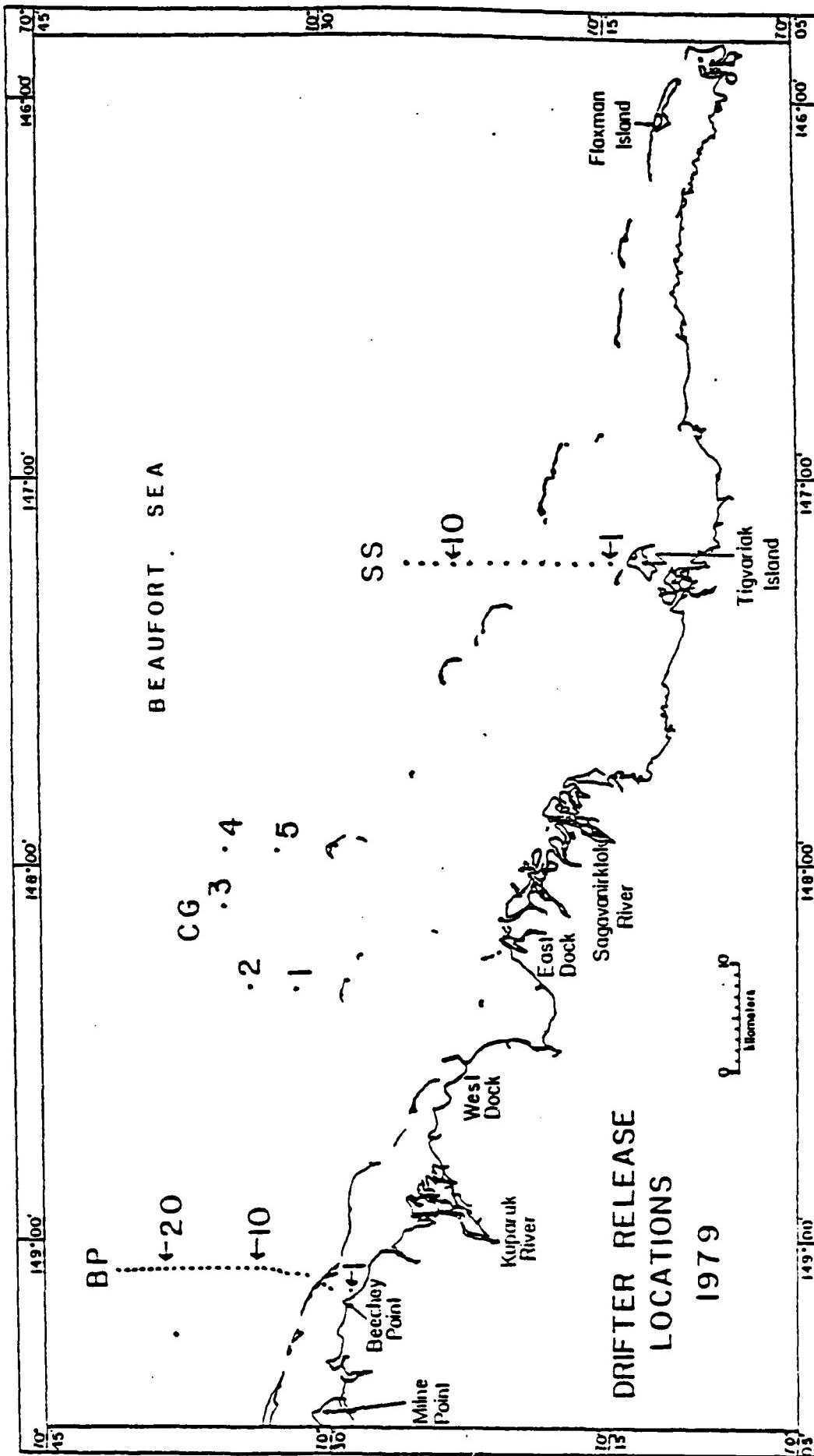


Figure 1. Drifter release locations - Beaufort Sea, Alaska, 1979

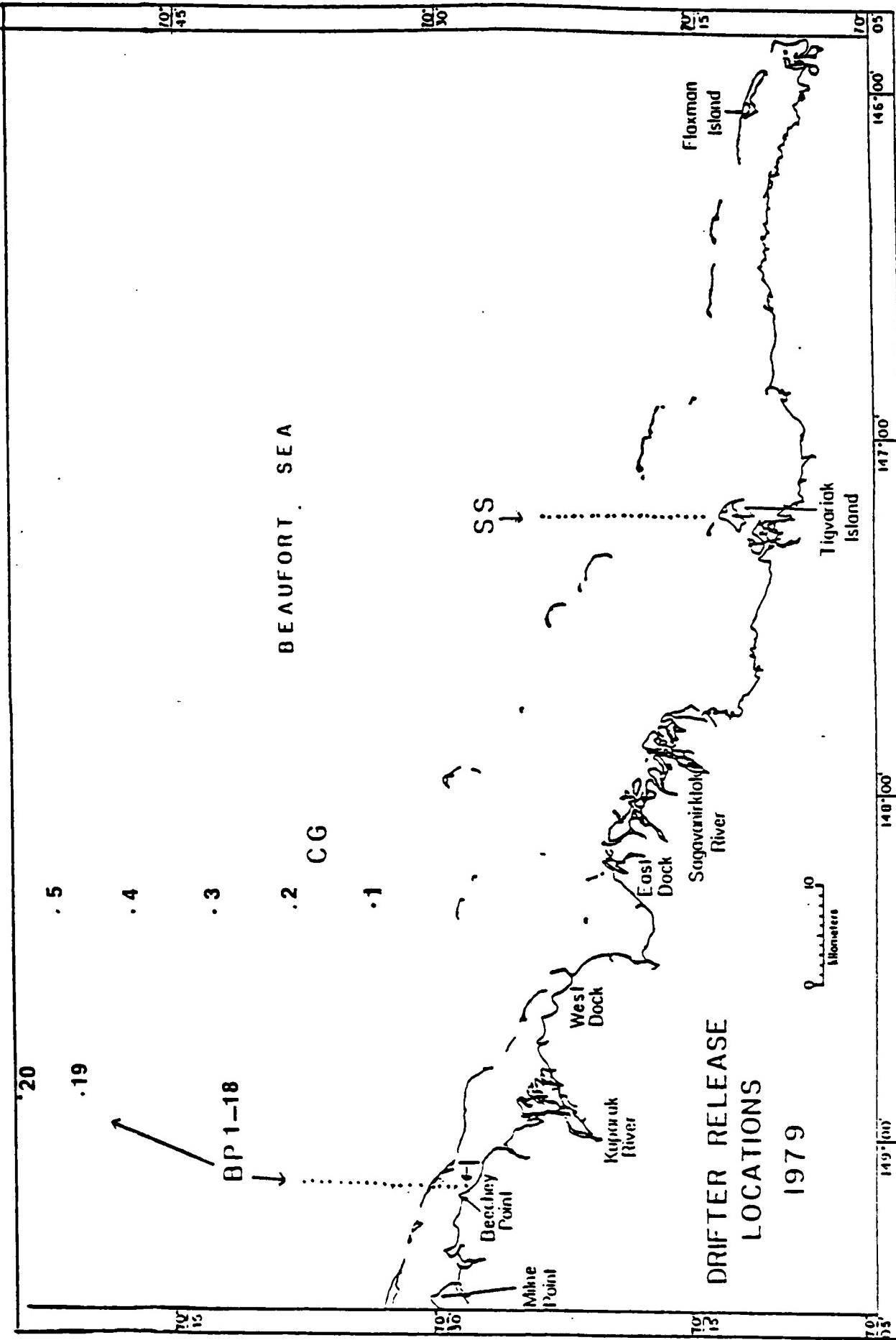


Figure 2. Drifter release locations - Beaufort Sea, Alaska, 1980

TABLE 2  
SUMMARY OF DRIFTER MOVEMENTS

<u>Year</u>	<u>Stations</u>	<u>Direction of Movement</u>	<u>Number</u>	<u>Percent</u>
1979	BP 1-26	East along coast	25	(76%)
		On shore	2	( - )
		West along coast	8	(24%)
	SS 1-13	East along coast	29	(24%)
		On shore	13	( - )
		West along coast	91	(76%)
	CG 1-5	East along coast	3	(33%)
		West along coast	6	(67%)
	-----		-----	
1979 (totals)		East along coast	40	(25%)
		Onshore	15	( - )
		West along coast	122	(75%)
-----				
1980	BP 1-20	East along coast	14	(14%)
		Onshore	41	( - )
		West along coast	83	(86%)
	SS 1-20	East along coast	6	(06%)
		Onshore	4	( - )
		West along coast	91	(94%)
	CG 1-5	East along coast	2	(05%)
		West along coast	36	(95%)
	-----		-----	
1980 (totals)		East along coast	22	(09%)
		Onshore	45	( - )
		West along coast	210	(91%)
-----				
1979-80 (combined totals)		Easterly	120	(26%)
		Westerly	334	(74%)

TABLE 3  
MAXIMUM EASTWARD AND WESTWARD DRIFTER RECOVERIES

<u>Year</u>	<u>Stations</u>	<u>Maximum Eastward (KM)</u>	<u>Maximum Westward (KM)</u>
1979	BP 1-25	118.5	253
1979	SS 1-13	48	96
1979	CG 1-5	82	30
1980	BP 1-20	153	251
1980	SS 1-20	62	337
1980	CG 1-5	207	178.5

All of the release transects show a predominance of drifters moving to the west except for BP 1-26 (1979). The results from this transect (Table 2) show 76% of the drifters found were east of the release sites. Review of National Weather Service wind data for Barter Island and Point Barrow indicate some short episodes of westerly winds which would have moved the drifters to the east. These drifters generally did not move far to the east (Figure 3). However, should a longer period of westerly wind occur, larger drift to the east would ensue.

Another interesting facet of the drifter data returns is the apparent preferred beaching areas of drifters. Figure 3 depicts the number of drifter recoveries east and west of their release points for 10 kilometer intervals. There is a peak of recoveries both east and west of release sites for the distances 0-10 and 10-20 km from the release sites. Matthews (1981a) speculates that this onshore movement of drifters may be caused by under-ice currents when the drifters were first released. Further verification of this assumption is necessary and highlights the need for measurements of under-ice currents. Two other areas where the frequency of recoveries peaks are 40-50 and 120-130 kilometers west of the release sites. The peak at 40-50 kilometers is caused mainly by releases from SS stations. These drifters moved west and many of them beached in the Prudhoe Bay area. The peak at 120-130 kilometers is caused mainly by drifters from BP station beaching at Harrison Bay. This type of information is extremely important for the development of oil spill contingency plans for the North Slope area.

## 5.0 CONCLUSIONS

1. The results of two years of drifter releases indicate that they respond primarily to wind-driven surface water movement during open water conditions. The data suggest the dominance of easterly winds during open water conditions caused 334 (74%) of drifter recoveries to be found west of their release sites.
2. Although easterly winds cause movement to be from east to west there can be significant drifter movement in the opposite direction.
3. Dispersion of the drifters is significant as shown in Table 3. Dispersion from a single line of drifter releases (BPI-25, 1979) was 371.5 kilometers.
4. Dispersion from a single station (point source) can be significant. From the fifty drifter releases at site BP-8 (1980) one drifter was found 122 kilometers west of the release point, and another was found 129 kilometers east of the release site. Thus the total separative distance for two drifters released at the same spot at the same time was 251 kilometers.
5. For those drifters that were found, a significant number beached "onshore" of their release sites.

6. There are certain coastal areas where "preferred" beaching of drifters occurs. This preferred beaching appears to be a function of release site and meteorological conditions. This type of information and future information from subsequent drifter releases in other areas can therefore provide extremely important data for oil spill contingency planning.

#### 6.0 SUGGESTIONS FOR FURTHER STUDIES

Results of the experiment indicate that there is a strong possibility that oil released offshore in the Beaufort Sea will impact the North Alaskan Coast. Also indications are that oil from a single source may be dispersed over great distances (up to 250 km) along the Coast. However, little is known about the transport trajectories, or the circulation dynamics governing these trajectories. Lagrangian drifter studies (satellite tracked) and current surveys (current meter deployments) in the nearshore area could contribute toward providing additional information which would be useful in understanding these circulation patterns.

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**APPENDIX A**  
**DRIFTER SPEED COMPARISON AND DATA**

DRIFTER	LATITUDE LONGITUDE	RELEASE DATE	RECOVERY DATE	ADULT YOUNG	DISTANCE (KNOTS)	WAVE (CM/SEC)	WAVE DIRECTION	LOCATN	CG " released by the Coast Guard
									SS - Stellafson Sound - releases due north of Liverlock Island
DP 1	149° 0.3' 70° 29.5'	May 10	July 9	53	24	.5	.6	East	ARCO WEST DOCK
		May 10	Aug. 27	102	24	.2	?.	East	West dock - West side, halfway be- tween dockhead #2 & 3
		May 10	July 20	72	6	.1	.1	West	In a bay 1/2 between Drill Point & Kavarak Point
		May 10	July 10	62	24	.4	.5	East	ARCO Causeway. West side 300 m shortward of dockhead #2
DP 2	149° 0.1' 70° 30.0'	May 10	July 25	69	18.5	.3	.3	East	Stump I. North side East end
		May 10	July 14	58	11	.2	.2	East	Southeast Long Island Near shore beach
		May 10	July 14	58	11	.2	.2	East	Southeast Long Island Near shore beach
		May 10	July 14	58	11	.2	.2	East	Southeast Long Island Near shore beach
DP 3	149° 7.0' 70° 30.3'	May 10	July 21	65	22	.3	.3	East	Stump I. North side West end
		May 10	July 20	65	25	.4	.5	East	ARCO Causeway. East side, 300 m toward dockhead #3 from dockhead #2
DP 4	149° 5.6' 70° 31.2'								

DRIERIA SHIELD COMMUNION AND DATA - 1979

MILES	RELATIVE POSITION	RECOMMENDATION	WAVES MILE	WAVES MILE	DISTANCE (KILOMETERS)	RAINFALL (MM/MM)	RAINFALL (MM/MM)	DIRECTION	MICROWAVE LINKDOWN	
									UP	DOWN
Mile 4	149° 5.6°, 70° 31.2°,	May 10	July 21	65	21	3	.3	East	Stamp I. North side near middle of island	
MP 6	149° 5.7°, 70° 32.3°,	May 18	July 21	65	13.5	.2	.2	West	Near old wood house on Milne Point	
MP 7	149° 4.0°, 70° 32.6°,	May 19	Aug. 6	60	25	.3	.3	East	East side Prudhoe Causeway	
MP 9	149° 5.3°, 70° 33.0°,	May 19	July 20	71	10	.1	.1	West	Milne Point Beach (off hill area)	
MP 10	149° 4.8°, 70° 33.4°	May 19	July 21	64	14	.2	.2	West	Near old wood house Milne Point	
MP 11	3.5 miles of Colville Island	May 21	July 21	62	21	.3	.3	East	Stamp I. North side Wood	
		May 21	Aug. 6	60	15	.2	.2	West	Milne Point Beach (off hill area)	
		May 21	July 21	60	89	1.3	1.5	East	Bullen Point	
		May 21	July 25	66	19	.3	.3	East	North side of Egg I.	
		May 21	July 25	66	14	.2	.2	West	.5 km east along shoreline from Kavcarak Point	
									4.0 miles north of Colville I.	

## ORIGIN SPEED COMPARISON AND DATA - 1979

RELEASE	RELEASE DATE	RELEASE LOCATION	RECOVERY DATE	WATER DEPTH	DISTANCE TRAVELED	ROUTE (LEGENDS)	RATE (M/HRS)	DIRECTION	RECOVERY LOCATION		
									DATE	WATER DEPTH	ROUTE (LEGENDS)
MR 12	4.5 miles north of Cottle I.	May 21	July 23	64	10.5	.2	.2	West	Near the point on east side of Beechey Point		
MR 13	5.0 miles north of Cottle I.	May 21	Aug. 14	66	34	.4	.5	East	North side Reindeer I.		
MR 21	4.5 miles	May 21	Aug. 4	76	32	.4	.5	East	In water 100' offshore 70° 27'.13 140° 14'.5N		
MR 21	5.0 miles	May 21	Aug. 22	94	29	.3	.3	East	North side Prudhoe Causeway 70° 25'.3 140° 30'.30		
MR 15	6.0 miles north of Cottle I.	May 21	Aug. 5	77	119	1.5	1.7	West	600 yards west of Husky Oil Camp, Naval Petro- leum Reserve, Lonely		
MR 10	7.5 miles north of Cottle I.	May 22	Aug. 14	85	31	.4	.5	East	North side Reindeer I.		
MR 22	9.0 miles north of Cottle I.	May 22	Sept. 25	102	253	.4	.5	West	On beach in Pet 4, Cape Simpson, old Dr W line site		
MR 21	9.5 miles	May 22	Aug. 4	75	61.5	.8	.9	East	70° 24'.2' 147° 31'.4'		
MR 22	9.5 miles	May 22	Aug. 27	98	37.5	.4	.5	East	On shore, south of west dock		



RELEASE DATE	RELEASE TIME	RECOVERY DATE	RECOVERY TIME	DAYS	DISTANCE (KILOMETERS)	MILE (KMS/MY)	RATE (KMS/SEC)	DIRECTION	LOCATION
SSS 1	1 mile north of Igvarlak Island	May 24	July 24	62	10	.2	.2	West	Mainland branch of east Foggy Island Bay
May 24		July 26	64	6.5	.1	.1	West	Southwest beach Igvarlak Island	
May 24	Aug. 7	76	15	.2	.2	.2	East	East of Bullion Island .3 mi. from tip of west dock	
SSS 2	2 miles north of Igvarlak Island	May 24	July 11	49	50	1.0	1.2	West	Stump I. north side, near middle of Island
May 24		July 16	56	3.5	.1	.1	East	Along north shore Igvarlak Island	
May 24	July 20	58	6	.1	.1	.1	East	Along east shore Igvarlak Island	
May 24	July 20	58	6	.1	.1	.1	East	Along east shore Igvarlak Island	
May 24	July 21	59	54	.9	1.0	1.0	West	Stump I. north side, west end.	
May 24	July 21	59	55	.9	1.0	1.0	West	ARCO Causeway, west side 300 m shoreward of Onckhwaad #2	
May 24	Aug. 27	96	47.5	.5	.6	.6	West	West side east dock	





## WILDLIFE SPEED CHARTERISATION AND DATA - 1979

RELEASE DATE LOCATION	RECOVERY DATE	DISTANCE (MILES)	DAYS APART	DISTANCE (MILES)	RATE (MPH/HRS)	WAVE (WAVES)	DIRECTION	RECUPERATION
								LOCATION
SS 5 4 miles north May 24 of Tigravatik Island	July 25 63	50	47.5	.0	.9	West	Stump Is. north side west end	ARCO Causeway, east side, 1/2 way between dockhead #1 and dock- head #2
May 24	July 20 91	40.5	47.5	.0	.9	West	East side Prudhoe Causeway	East side Prudhoe Causeway
May 24	Aug. 22 63	46.	46.	.7	.8	West	On shore just south of west dock	On shore just south of west dock
May 24	July 25 56	0	56	1	.1	West	Along north shore Tigravatik Island	Along north shore Tigravatik Island
SS 6 5 miles north May 24 of Tigravatik Island	July 18 59	49	49	.8	.6	West	Stump Is. north side west end	Stump Is. north side west end
May 24	July 21 59	49	49	.8	.9	West	Stump Is. north side west end	Stump Is. north side west end
May 24	July 21 59	50	50	.0	.9	West	ARCO Causeway, east side, 50 m toward dockhead #2 from dock- head #2	ARCO Causeway, east side, 50 m toward dockhead #2 from dock- head #2
May 24	Aug. 11 60	21.5	.3	.3	West	North of Sagavanirktok River	North of Sagavanirktok River	
May 24	Aug. 27 96	46.5	.5	.6	West	West side east dock	West side east dock	

WATER	LOCATION	DATE	RECOVERY	WEIGHT	DISTANCE	WAVE (MM)	WAVE (CH/SIC)	DIRECTION	RECOVERY LOCATION
SSS 6	5 miles north of Tukuvatik Island	May 24	Aug. 27	96	50	.5	.6	West	On shore, south of west dock
		May 24	Aug. 10	56	84	1.5	1.7	West	Beach east of Milne Pt., 2 km east of Harr. cabin
		May 24	Aug. 31	100	49	.5	.6	West	East shore Prudhoe Bay
		May 24	Aug. 31	100	49	.5	.6	West	East shore Prudhoe Bay
		May 24	July 1	39	52	1.3	1.5	West	Shore up to 1 m left of west dock
SSS 7	7 miles north of Tukuvatik Island	May 24	July 21	59	48.5	.8	.9	West	Stump Is. north side west end
		May 24	Aug. 11	80	40	.6	.7	West	148°30'30" 70°23'18"
		May 24	Aug. 10	79	47	.6	.7	West	1/2 m west of east dock, Prudhoe Beach
		May 24	July 25	63	49	.0	.9	West	West shore of Prudhoe Bay above Putuligayik River
		May 24	July 25	63	49	.0	.9	West	West shore of Prudhoe Bay above Putuligayik River
		May 24	Aug. 18	56	82	1.5	1.7	West	East of Milne Point Beach near sand house



## MURKIN SPUD COMPARISON AND DATA - 1979

RELEASE #	RELEASE LOCATION	RECOVERY DATE	DAYS APART	DISTANCE (KILOMETERS)	RATE (KILOMETERS) (CYSIC)	DIRECTION	RECOVERY LOCATION
SS 0	0 miles north of Tugartak Island	July 24	July 20	50	.7	West	ARCO Causeway, east side 300 m toward dockhead #3 from dock- head #2
							Stump Is., north side, west end
May 24		July 21	59	49	.8	West	
May 24		Aug. 27	96	46.5	.5	West	West side, east duck
May 24		July 25	63	50	.8	West	West shore of Prudhoe Bay above Putulitayak River
May 24		Sept. 4	104	11	.1	West	North shore Harwhal Is.
May 24		Sept. 4	104	11	.1	West	North shore Harwhal Is.
May 24		Sept. 4	104	11	.1	West	North shore Harwhal Is.
May 24		July 24	62	10.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		July 24	62	10.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		July 24	62	18.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		July 24	62	10.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		July 24	62	10.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		July 24	62	10.5	.3	West	Hal Inland Beach of east Foggy Is., Bay
May 24		Aug. 14	103	10.5	.2	West	Hal Inland Beach of east Foggy Is., Bay

MISSION #	LOCATION	PLATEAU LEVEL	RECOVERY DATE	DEPTH (METERS)	DISTANCE (KILOMETERS)	DATE (MAY)	WIND (M/S)	DIRECTION (DEGREES)	WIND (M/S)	WIND (M/S)	RECOVERY LOCATION
55 9	9 miles north of Flinarak I. Land	May 24	July 21	59	50	0	.9	West	.9	.9	Stump Is. north side west end
		May 24	July 25	63	50	0	.9	West	.9	.9	Stump Is. north side, west end
		May 24	July 21	59	50	0	.9	West	.9	.9	Stump Is. north side, west end
		May 24	July 20	58	46.5	0	.9	West	.9	.9	ARC Causeway, east side 1/2 way between dockhead #3 & dockhead #2
		May 24	July 25	63	51.5	0	.9	West	.9	.9	Stump Is. north side, west end
		May 24	July 25	63	51.5	0	.9	West	.9	.9	Stump Is. north side, east end
		May 24	Aug. 6	75	47	.6	.7	West	.7	.7	1 mi. west of east end of Prudhoe Bay on beach
		May 24	Aug. 22	60	40.5	0	.9	West	.9	.9	West side Prudhoe Cause- way
		May 24	July 25	65	49.5	0	.9	West	.9	.9	West shore of Prudhoe Bay above Putuligayuk River

## WATER SPEED COMPARISON AND DATA - 1979

RELEASE #	RELEASE LOCATION	RECOVERY DATE	DAYS ABOUT	DISTANCE (KILOMETERS)	RAFT (KMH/DAY)	RAFT (CM/SEC)	DIRECTION		RECOVERY LOCATION
							RAFT	DIRECTION	
SS 9	9 miles north of Fluvialik Island	May 24	Aug. 8	77	10.5	.1	.1	East	East end Pole Is. offshore beach
		May 24	Aug. 8	77	10	.1	.1	East	Pole Island
		May 24	Aug. 8	77	10	.1	.1	East	Pole Island
		May 24	Aug. 8	77	10	.1	.1	East	Pole Island
		May 24	July 21	59	46.5	.8	.9	West	ARCO Causeway, east side
		May 24	July 24	62	49	.8	.9	West	South of Putuligayuk River
		May 24	Aug. 31	100	46	.5	.6	West	East shore Prudhoe Bay
		May 24	July 1	39	50	.1.3	1.5	West	Shore up to 1 m left of west dock
		May 24	July 1	39	50	1.3	1.5	West	Shore up to 1 m left of west dock
		May 24	Aug. 22	60	45.5	.8	.9	West	East side Prudhoe Causeway
SS 10	10 miles north of Fluvialik Island	May 24	Sept. 4	104	10	.1	.1	West	North shore Nauklai Is.
		May 24	July 24	62	12	.2	.2	West	Inland beach of east Foggy Is. Bay
		May 24	July 24	62	12	.2	.2	West	Inland Beach of east Foggy Is. Bay



BRILLIR SPEED COMPARISON AND DATA - 1979

RELEASE NUMBER	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS APART	DISTANCE (KILOMETERS)	RATE (KM/DAY)	RATE (CH/SLC)	DIRECTION	RELEASE LOCATION
									ACCO Causeway, east side, 300 m towards dockhead #3 from dockhead #2
SS 12	12 miles north of Tigray Is. and	May 24	July 20	58	47.5	.8	.9	West	
		May 24	Aug. 6	75	50	.7	.0	West	1 ml. west of east dock of Prudline Bay on branch
		May 24	Aug. 27	96	49	.5	.6	West	West side, east dock
		May 24	July 26	64	50	.0	.9	West	South of old east dock on shore
		May 24	Aug. 14	83	25	.3	.3	West	Halibut beach of east Foggy Is. Bay
		May 24	July 26	64	21.5	.3	.3	West	West beach of Tigray Island
		May 24	Aug. 31	100	47.5	.5	.6	West	East shore Prudline Bay
		SS 13	12.5 miles north of Tigray Is. and	11	47.5	.6	.7	West	148°30'30" 70°23'10"
		May 24	Aug. 6	75	61	1.1	1.3	West	Hilne Pt. Beach (off hut area)
		May 24	Aug. 18	67	60	.9	1.0	West	1 km east of MARL cahns on beach east of T. Hilne Pt.
		May 24	Aug. 8	77	15	.2	.2	East	Mid hole Is. to west split offshore beach

BOTTLED STUDY COMPARISON AND DATA - 1979

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS MORTALITY	DISTANCE (KILOMETERS)	RATE (KM/HOUR)	(CH/SIC)	DIRECTION	RECOVERY LOCATION
								DIRECTION	
CG 2	10 km north Reindeer Island	July 12	Aug. 27	.67	21	.4	.5	West	On shore, south of west dock
CG 3	10 km north- west of Cross Island	July 12	Aug. 24	.44	82	1.9	2.2	West	North shore, Flaxman Island
CG 4	10 km north of Cross Island	July 12	Sept. 2	.53	82	1.5	1.7	West	Inward side, Flaxman Island
CG 5	5 km north of Cross Island	July 12	Aug. 27	.47	30	.6	.7	West	On shore, south of west dock
		July 12	Sept. 2	.53	77.5	1.5	1.7	West	Seaward side, Flaxman Island
		July 12	Aug. 31	.51	29.5	.6	.7	West	West dock, east side of dockhead #3
		July 12	Sept. 13	.64	29.5	.5	.6	West	Shore to right of west dock
		July 12	Aug. 14	.34	14	.4	.5	West	North side Reindeer Island
		July 12	Aug. 24	.44	26	.6	.7	West	Near center of Stump Island on east side

**APPENDIX B**

**1980 DRIFTER SPEED COMPARISON AND DATA**

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tugvarlik Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	ADRIFFER LOCATION	DISTANCE (KM)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 1	0.5 mi true N of Beechey Pt.	Mar. 28	5 Aug.	131	.17	.20	East 1/3 way to W along Stump Lagoon
		Mar. 28	9 Aug.	135	.02	.02	East 2 km E of Beechey pt., 100 meters inland on South shore of narrow lake 1.0 m above water line
		Mar. 28	9 Aug.	135	.01	.01	East 1 km E of Beechey pt. 10-15 m in- land on NE shore of stream outlet
		Mar. 28	9 Aug.	135	.01	.01	East 1 km E of Beechey pt. 10-15 m in- land on NE shore of stream outlet
BP 2	1.0 mi true N of Beechey Pt.	Mar. 28	5 Aug.	131	.25	.29	East end oceanside Argo Is.
		March 28	9 Aug.	133	.06	.08	East 1.3 km E of Beechey pt. on beach
		March 28	9 Aug.	135	.02	.03	East 1 km E of Beechey pt. 10-15 m in- land on NE shore of stream outlet

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stafansson Sound- releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard

km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 3	1.5 mi true N of Beechey pt.	Mar. 28	July 19	114	116	1.01	1.17	West	South shore of Kogru River SW of landing strip
		Mar. 28	July 23	118	112.5	.95	1.1	West	North shore of Peninsula above Kogru River 3 mi E of Saktuina pt.
		Mar. 28	July 23	118	112.5	.95	1.1	West	North shore of peninsula above Kogru River 3 mi E of Saktuina pt.
		Mar. 28	Aug. 2	128	123	.96	1.11	West	18 km South of Cape Halkett
		Mar. 28	Aug. 2	128	123	.96	1.11	West	18 km South of Cape Halkett

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stafansson Sound- releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 3	1.5 mi true N of Beechey pt.	Mar. 28	July 19	114	116	1.01	1.17	West	South shore of Kogru River SW of landing strip
		Mar. 28	July 23	118	112.5	.95	1.1	West	North shore of peninsula above Kogru River 3 mi E of Saktuna Pt.
		Mar. 28	July 23	118	112.5	.95	1.1	West	North shore of peninsula above Kogru River 3 mi E of Saktuna Pt.
		Mar. 28	July 21	116	96.5	.83	.96	West	North of Garry Creek
		Mar. 28	Aug. 2	128	123	.96	1.11	West	10 km South of Cape Halkett
		Mar. 28	Aug. 2	128	123	.96	1.11	West	10 km South of Cape Halkett

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigravik Island

BP = releases due north of  
 Beechey Point  
 m = meters  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometers  
 cm = centimeters

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT DAYS	DISTANCE (KM/DAY)	RATE (KM/DAY)	DIRECTION (CM/SEC)	RECOVERY LOCATION
BP 4	2.0 mi true N of Beechey Point (dry ice hole)	Mar. 28	Aug. 9	135	4.9	.03	.04	East 1.9 km E of Beechey Point on beach buried in 8 cm of sand
		Mar. 28	Aug. 9	135	4	.02	.03	East 1 km E of Beechey pt. 10-15 m inland on NE shore of stream outlet
		Mar. 28	Jul. 23	118	120	1.01	1.17	West N shore Peninsula above Kogru River 3 mi E of Saktuna Point
		Mar. 28	Jul. 23	118	120	1.01	1.17	West N shore Peninsula above Kogru River 3 mi E of Saktuna Point
		Mar. 28	Aug. 2	128	122.5	.95	1.1	West 18 km S of Cape Halkett
		Mar. 28	Aug. 2	128	122.5	.95	1.1	West 18 km S of Cape Halkett

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Fugvarfak Island

BP = releases due north of  
 Beechy Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADrift	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 4	2.0 mi true Mar. 28	Aug. 23	149	5	.03	.03	East	Inside the V at the E of Cottle Island
	N of Beechey Point (dry ice hole)	Mar. 28	Aug. 23	149	.03	.03	East	Inside the V at the E of Cottle Island
		Mar. 28	Jul. 24	119	.31	.35	West	SE tip of Thetis Island, oceanside
BP 5	2.5 mi true Mar. 28	Aug. 5	131	30	.22	.26	East	W. Dock, Prudhoe Bay
	N of Beechey Pt.	Mar. 28	Aug. 10	136	3.5	.02	West	N side, Bodfish Island
Mar. 28	Aug. 10	136	3.5	.02	.02	.02	West	N side, Bodfish Island
	Aug. 10	136	3.5	.02	.02	.02	West	N side, Bodfish Island
Mar. 28	Aug. 5	131	1	0	0	0	East	Cottle Island - oceanside
	Aug. 5	131	1	0	0	0	East	Cottle Island - oceanside
Mar. 28	Aug. 5	131	2	.01	.01	.01	East	Cottle Island - oceanside
	Aug. 5	131	3	.02	.02	.02	East	Cottle Island - oceanside

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigravik Island

Rp = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard

km = kilometer

cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFT TIME (DAYS)	DISTANCE (KM)	RATE (KM/DAY)	DATA (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 5	Mar. 28	Aug. 5	131	2.5	.01	.02	East	Cottle Island - oceanside

DRIFTER	LOCATION		RELEASE DATE	RECOVERY DATE	DRIFT TIME (DAYS)	DISTANCE (KM)	RATE (KM/DAY)	DATA (CM/SEC)
BP 5	2.5 mi true N of Beechey Point	Mar. 28	Aug. 5	131	2.5	.01	.02	East
								Cottle Island - oceanside
Mar. 28	Aug. 5	131	2.5	.01	.02	East	Cottle Island - oceanside	
Mar. 28	Aug. 5	131	1	0	0	East	Opposite tower on Cottle Island - oceanside	
Mar. 28	Aug. 5	131	.75	0	0	East	1/4 mi. W of tower on Cottle Island - oceanside	
Mar. 28	Aug. 5	131	.75	0	0	East	1/4 mi. W of tower on Cottle Island - oceanside	
Mar. 28	Aug. 5	131	.75	0	0	East	1/4 mi. W of tower on Cottle Island - oceanside	
Mar. 28	Aug. 5	131	6	.04	.05	East	West end of Long Island - oceanside	
Mar. 28	Aug. 5	131	6	.04	.05	East	West end of Long Island - oceanside	

DRIFT SPEED COMPARISON AND DATA - 1980  
 SS = Stafansson Sound - releases due north  
 of Tigrayak Island

Bp = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 5	2.5 mi true N of Beechey Point	Mar. 28	Aug. 5	131	10	.07	.08	East	Midway along W half of Long Island - oceanside
Mar. 28	Aug. 5	131	10	.07	.08	.08	.08	East	Midway along W half of Long Island - oceanside
Mar. 28	Aug. 5	131	10	.07	.07	.08	.08	East	Midway along W half of Long Island - oceanside
Mar. 28	Aug. 5	131	10	.07	.07	.08	.08	East	Midway along W half of Long Island - oceanside
Mar. 28	Aug. 5	131	14	.1	.1	.12	.12	East	East end West half of Long Island - oceanside
Mar. 28	Aug. 5	131	10.5	.08	.08	.09	.09	West	Pingok Island
Mar. 28	Aug. 5	131	15	.11	.11	.13	.13	West	West end Pingok Lagoon
Mar. 28	Aug. 5	131	97	.74	.74	.85	.85	West	2 mi South of Atigaru Point

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point

m = meter

mi = mile

CG = releases by Coast  
 Guard

km = kilometer

cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 6	Mar. 30	Aug. 2	126	42.5	.33	.39	East	1/2 mi West of East Dock

BP 6	Mar. 30	Aug. 2	126	42.5	.33	.39	East	1/2 mi West of East Dock
BP 6	Mar. 30	Aug. 10	134	3	.02	.02	West	North side Bodfish Island
BP 6	Mar. 30	Aug. 11	135	3	.02	.02	East	North side Cottle Island
BP 6	Mar. 30	Aug. 10	134	3.5	.02	.03	West	North side Bodfish Island
BP 6	Mar. 30	Aug. 10	134	3.5	.02	.03	West	North side Bodfish Island
BP 6	Mar. 30	Aug. 5	129	2	.01	.01	East	1/4 mi West of tower on Cottle Island - oceanside
BP 6	Mar. 30	Aug. 5	129	15.5	.12	.13	East	East end West half of Long Island - oceanside
BP 6	Mar. 30	Aug. 5	129	27	.2	.24	East	Stump Island - oceanside
BP 6	Mar. 30	Aug. 5	129	15.5	.12	.13	East	East end Long Island - oceanside
BP 6	Mar. 30	Aug. 4	128	29.5	.23	.26	East	1.5 mi West of West Dock near Pt. McIntyre

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS= Stefansson Sound - releases due north  
 of Tigvariaq Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADRIFF	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 7	Mar. 30	Aug. 10	134	3.5	.02	.03	West	North side, Rodfish Island
							West	North side, Rodfish Island
							West	4.5 mi West of Saktulna Point
							East	East end West half of Long Island - oceanside
							West	4 mi West of Saktulna Point
							West	1.5 mi West of Saktulna Point
							West	10 km South of Cape Halkett on beach
							West	10 km South of Cape Halkett on beach

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS - Steenson Sound - releases due north  
 of Fligstad Island

RP = releases due north of  
 Beechey point

m = meter

CG = releases by Coast  
 Guard

km = kilometer

RELEASE #	RELEASE LOCATION	RECOVERY DATE	ADRIFF DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DURATION (HOUR)	RECOVERY LOCATION
BP B	4.0 mi true N of Beechey	Mar. 30 Aug. 5	129	4	.03	.03	East Cottle Island - oceanside
		Mar. 30 Aug. 5	129	115	.09	1.03	West 4.5 mi West of Saktuna Point
		Mar. 30 Aug. 5	129	16	.12	.14	West end East half of long Island-oceanside
		Mar. 30 , Aug. 5	129	9	.06	.00	West End of E Island between pingok Is. & Cottle Is. Lagoon (channel) side
		Mar. 30 Aug. 5	129	9	.06	.00	West End of E Island between pingok Is. & Cottle Is. Lagoon (channel) side
		Mar. 30 Aug. 5	129	24	.18	.21	West E. end Spy Is. - oceanside
		Mar. 30 Aug. 5	129	15	.11	.13	East Long Island - oceanside
		Mar. 30 Aug. 4	128	29	.22	.26	East 1.5 mi West of W. Dock near pt. McIntyre
		Mar. 30 Aug. 2	126	122	.96	1.12	West 10 km South of Cape

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS= Stefansson Sound - releases due north  
 of Tigvariaq Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm - centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT (ADRIFF)	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 9	4.5 mi true N of Beechey Point	Mar. 30	Aug. 2	126	122	.96	1.12	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 2	126	122	.96	1.12	West	18 km S of Cape Halkett on beach
BP 10	5.0 mi true N of Beechey Point	Mar. 30	Aug. 2	126	122	.96	1.12	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 5	129	110	.85	.98	West	4 mi West of Saktuina Point
BP 11	5.5 mi true N of Beechey Point	Mar. 30	Aug. 5	136	122	.89	1.03	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 5	136	122	.89	1.03	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 5	136	122	.89	1.03	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 5	136	122	.89	1.03	West	18 km S of Cape Halkett on beach
								West	Mouth of Kallikpik River
								West	18 km S of Cape Halkett on beach
								West	18 km S of Cape Halkett on beach

## DRIFTER SPEED COMPARISON AND DATA -1980

SS = Stefansson Sound - releases due north  
of Tigrayak Island

CG = releases by Coast Guard

km = kilometer

cm = centimeter

BP = releases due north of Beechey Point

m = meter

mi = mile

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS DRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
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BP 12	6.0 mi true N of Beechey Point	Mar. 30	Aug. 12	136	122	.89	1.03	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 19	143	122	.85	.98	West	18 km S of Cape Halkett on beach
		Mar. 30	Aug. 17	141	109	.77	.89	West	Mouth of Kallikpik River
		Mar. 30	Aug. 2	126	109	.86	1.00	West	Mouth of Kallikpik River
		Mar. 30	Aug. 4	128	251	1.96	2.26	West	Cooper Island 71°14' 155°40'
		Mar. 30	Jul. 27	151	37	.24	.28	West	East of Thetis Island - oceanside
BP 13	6.5 mi true N of Beechey Point	Mar. 30	Aug. 5	129	97	.75	.87	West	1 mi West of Atigaru
BP 14	7.0 mi true N of Beechey Point	Mar. 30	Aug. 5	129	110	.85	.90	West	S Kogru
		Mar. 30	Aug. 5	132	115	.87	1.00	West	1 mi West of Saktulna Point
		Mar. 30	Aug. 17	141	121	.85	.99	West	15 km S of Cape Halkett
		Mar. 30	Sep. 19	144	96	.55	.63	West	44 mi SE of Camp

DRIFTER SPILL COMPANION AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tivqvariaq Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS ADRIFF	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 15	7.5 mi true N of Beechey point	Mar. 30	Aug. 2	126	142	1.12	1.3	West	152°54' 70°55' N shore of Island
		Mar. 30	Aug. 12	136	122	.89	1.03	West	10 km S of Cape Halkett on beach
		Mar. 30	Aug. 3	127	122	.96	1.11	West	10 km S of Cape Halkett on beach
		Mar. 30	Aug. 2	126	122	.96	1.12	West	10 km S of Cape Halkett on beach
BP 16	8.0 mi true N of Beechey point	Mar. 30	Aug. 5	129	115	.89	1.03	West	4.5 mi W of Sakutina point
		Mar. 30	Aug. 5	129	110	.85	.98	West	1.5 mi W of Sakutina point
		Mar. 30	Aug. 5	129	109	.84	.97	West	S Kogru Entrance
		Mar. 30	Aug. 5	129	113.5	.87	1.01	West	4 mi W of Sakutina Point
		Mar. 30	Jul. 23	116	113.5	.97	1.13	West	4 mi W of Sakutina Point
		Mar. 30	Aug. 18	142	121	.85	.98	West	15 km S of Cape Halkett
		Mar. 30	Aug. 18	142	121	.85	.98	West	15 km S of Cape Halkett
		Mar. 30	Aug. 2	126	121	.96	1.11	West	15 km S of Cape Halkett
		Mar. 30	Aug. 5	129	251	1.94	2.25	West	Cupper Island

BIRU 1.R SHIP TO COMPARISON AND DATA - 1960  
 SS = Stefansson Sound - releases due north  
 of Tigravik Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 17	8.5 mi true N of Beechey Point	Mar. 30	Aug. 4	120	156.5	1.22	1.41	West Lonely, Alaska, on beach
		Mar. 30	Aug. 12	136	123.5	.9	1.05	West 18 km S of Cape Halkett on beach
		Mar. 30	Aug. 12	136	123.5	.9	1.05	West 18 km S of Cape Halkett on beach
		Mar. 30	Aug. 12	136	123.5	.9	1.05	West 18 km S of Cape Halkett on beach
		Mar. 30	Aug. 17	141	121.5	.86	.99	West 15 km S of Cape Halkett
		Mar. 30	Aug. 2	126	123.5	.98	1.13	West 18 km S of Cape Halkett on beach
		Mar. 30	Aug. 2	126	123.5	.98	1.13	West 18 km S of Cape Halkett on beach
		Mar. 30	Aug. 2	126	123.5	.98	1.13	West 18 km S of Cape Halkett on beach
		Mar. 30	Sep. 4	159	37.5	.23	.27	West South side Thetis Island near hut
BP 18	9.0 mi true N of Beechey Point	Mar. 30	Aug. 5	129	107	.82	.96	West N Kogru South of Sakutina Point
		Mar. 30	Aug. 5	129	114	.88	1.02	West 4 mi West of Sakutina Point
		Mar. 30	Aug. 5	129	115	.89	1.03	West 4.5 mi West of Sakutina Point

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS= Stefansson Sound - releases due north  
 of Tigrayak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
BP 18	9.0 mi true N of Beechey Point	Mar. 30	Aug. 18	142	121.5	.85	.99	West 15 km South of Cape Halkett
		Mar. 30	Aug. 12	136	123.5	.9	1.05	West 18 km South of Cape Halkett on beach
		Mar. 30	Aug. 2	126	123.5	.98	1.13	West 18 km South of Cape Halkett on beach
		Mar. 30	Aug. 2	126	123.5	.98	1.13	West 18 km South of Cape Halkett on beach
		Mar. 30	Sep. 13	168	40.5	.28	.33	Lee side of Cross Island
BP 19	24 mi north of Long Is.	Mar. 30	Aug. 12	136	153	1.12	1.3	West 18 km South of Cape Halkett on beach
BP 20	28 mi. north of Long Is.	Mar. 30	Aug. 7	131	69	.52	.6	West end of Thetis Is. oceanside

DRIFT SPOT COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

.5 mi true  
 N of Tigvarlak  
 Island

CG = releases by Coast  
 Guard

km = kilometer

cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFT	DAYS	DISTANCE (KM)	RATE (CM/DAY)	DIREC-	RECOVERY	
DRIFTER	LOCATION		ADRIFFT		(KM)	(CM/SEC)	TION	LOCATION	
SS 1	.5 mi true N of Tigvarlak Island	Mar. 31	Aug. 12	135	16	.11	.13	West	Mouth of Kadleroshilik River
		Mar. 31	Aug. 5	128	1.5	.01	.01	West	N shore of Island W of Tigvarlak Is.
		Mar. 31	Sep. 6	160	160	1.0	1.15	East	E of Beaufort Lagoon, 141°32' 69°45'

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFT	DAYS	DISTANCE (KM)	RATE (CM/DAY)	DIREC-	RECOVERY	
DRIFTER	LOCATION		ADRIFFT		(KM)	(CM/SEC)	TION	LOCATION	
SS 2	1.0 mi true N of Tigvarlak Island	Mar. 31			None recovered				
		Mar. 31	Jul. 14	106	103.5	.97	1.13	West	Beach of Oliktok Pt approx. 70°30' 149°50'
		Mar. 31	Aug. 19	142	105	1.3	1.5	West	Mouth of Kallikpik River
		Mar. 31	Aug. 12	135	205	1.51	1.75	West	18 km S of Cape Halkett on beach
SS 4	2.0 mi true N of Tigvarlak Island	Mar. 31	Aug. 4	127	57	.44	.51	West	1.5 mi W of W Dock
		Mar. 31	Aug. 8	131	76	.58	.67	West	1.5 mi S of Beechey Point
SS 5	2.5 mi true N of Tigvarlak Island	Mar. 31	Aug. 12	135	204.5	1.51	1.75	West	1.8 km S of Cape Halkett on beach

DRIFTER SPOTTED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

Bp = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS ADRIFFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 6	3.0 mi true N of Tigvariak Island	Mar. 31	Aug. 5	128	194.5	1.51	1.75	West	4 mi W of Saktulna Point
		Mar. 31	Aug. 5	128	195.5	1.52	1.76	West	4.5 mi W of Saktulna Point
		Mar. 31	Aug. 5	128	190.5	1.48	1.72	West	1 mi W of Saktulna Point
		Mar. 31	Aug. 5	128	192	1.5	1.73	West	N Kogru, S of Saktulna Point
		Mar. 31	Aug. 12	135	206	1.52	1.76	West	18 km S of Cape Halkett on beach
		Mar. 31	Aug. 12	135	206	1.52	1.76	West	18 km S of Cape Halkett on beach

**DRIFTING SPRAT COMPARISON AND DATA - 1980**  
**SS = Stefansson Sound - releases due north**  
**of Tignvarlak Island**

RP = releases due north of  
 Breechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ARIELF	LOCATION	DISTANCE (km)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 7	3.5 mi true N of Tignvarlak Island	Mar. 31	Aug. 12	135	206	1.52	1.76	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 17	140	204	1.45	1.60	West	15 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 12	135	206	1.52	1.76	West	10 km S of Cape Halkett on beach
SS 8	4.0 mi true N of Tignvarlak Island	Mar. 31	Aug. 12	135	206	1.52	1.76	West	10 km S of Cape Halkett on beach
		Mar. 31	Aug. 12	135	206	1.52	1.76	West	10 km S of Cape Halkett on beach
		Mar. 31	Sep. 18	172	325	1.00	2.10	West	35 mi S of Barrow on beach
		Mar. 31	Aug. 4	121	331	2.65	3.07	West	Cooper Island

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigrayak Island

Bp = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	RECOVERY DRIFT	DISSANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 9	4.5 mi true N of Tigrayak Island	Mar. 31	Aug. 5	128	6.5	0.5	West	Island N of Tigrayak Is. Oceanside
SS 10	5.0 mi true N of Tigrayak Island	Mar. 31	Aug. 5	128	195	1.52	1.76	West 4.5 mi West of Saktuina Pt.
		Mar. 31	Aug. 8	131	80	.61	.7	West 2 mi East of Kavearak Pt.
		Mar. 31	Jul. 15	107	101	.94	1.09	West 1.5 mi East of Oliktok Pt.
		Mar. 31	Aug. 18	141	203	1.43	1.66	West 15 km South of Cape Halkett
		Mar. 31	Aug. 2	125	205	1.63	1.89	West 18 km South of Cape Halkett on beach
		Mar. 31	Sept. 13	167	36.5	.21	.25	West Lee side of Cross Island
		Mar. 31	Aug. 16	139	336	2.41	2.79	West Cooper Is. 71° 14' 156° 15'
SS 11	5.5 mi true N of Tigrayak Island	Mar. 31	Aug. 12	135	205	1.51	1.75	West 18 km South of Cape Halkett on beach
		Mar. 31	Aug. 12	135	205	1.51	1.75	West 18 km South of Cape Halkett on beach

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DRIFTER	RELEASE LOCATION	RECOVERY DATE	DRIFT ADRIFFT	DAYS (KM)	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIREC- TION	RECOVERY LOCATION
SS 12	6.0 mi true	Mar. 31 N of Tigvarlak Island	Aug. 4	127	235	1.05	2.14	West	Lonely, Ak. on beach	
		Mar. 31	Aug. 5	128	191	1.49	1.72	West	N. Kogru, West facing entrance	
		Mar. 31	Aug. 12	135	206	1.52	1.76	West	18 km south of Cape Halkett on beach	
		Mar. 31	Aug. 2	125	206	1.64	1.9	West	18 km south of Cape Halkett on beach	
SS 13	6.5 mi true	Mar. 31 N of Tigvarlak Island	Aug. 10	113	82.5	.62	.71	West	North side, Bodfish Island	
		Mar. 31	Aug. 11	134	74.5	.55	.64	West	North side, Cottle Island	
		Mar. 31	Aug. 5	128	93	.72	.84	West	Pingok Island, oceanside	
		Mar. 31	Aug. 5	128	74	.57	.66	West	Cottle Island Oceanside	
		Mar. 31	Aug. 5	128	197	1.53	1.78	West	1 mi West of Saktulna Pt.	

DRIFTER SPEED COMPARISON AND DATA - 1980  
SS = Stefansson Sound - releases due north  
of Tivvaritak Island

BP = releases due north of  
Beechey Point

m = meter

mi = mile

CG = releases by Coast  
Guard

km = kilometer

cm = centimeter

RELEASE #	RELEASE DRIFTER	LOCATION	RECOVERY DATE	RECOVERY TIME	DRYDRAFT	DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIREC- TION	RECOVERY LOCATION
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SS 13 (Continued)	Mar. 31	Aug. 5	128	198	1.54	1.79	West	4.5 mi West of Sakutina pt.			
	Mar. 31	Aug. 5	128	53.5	.41	.48	West	Stump Island - oceanside			
	Mar. 31	Aug. 5	128	105.5	.82	.95	West	Spy Island - oceanside			
	Mar. 31	Aug. 8	131	81.5	.62	.72	West	East SE of Kavcarak Pt.			
	Mar. 31	Aug. 12	135	205	1.51	1.75	West	10 km South of Cape Halkett on beach			
	Mar. 31	Aug. 2	125	205	1.63	1.89	West	18 km South of Cape Halkett on beach			

UNIVERSITY OF TORONTO COLLEGE OF AGRICULTURE AND FORESTRY - 1960  
 SS = Stefansson Sound - releases due north  
 of Igvarlak Island

RW = releases due north of  
 Brechey Point

m = meter  
 ml = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADrift	DISTANCE (km)	RATE (km/day)	DIRECTION (CM/SEC)	TIME	LOCATION
SS 14	1.0 true N of Igvarlak Island	Mar. 31 Aug. 10	133	81	.6	.7	West	North side of Hudfish Island
	Mar. 31 Aug. 5	120	196.5	1.53	1.77	West	4 ml. West of Saktunla Pt.	
	Mar. 31 Aug. 5	120	196.5	1.53	1.77	West	4 ml. West of Saktunla Pt.	
	Mar. 31 Aug. 5	120	196.5	1.53	1.77	West	4 ml. West of Saktunla Pt.	
	Mar. 31 Aug. 5	120	58.5	.45	.52	West	Egg Island - oceanside	
	Mar. 31 Aug. 5	120	41	.32	.37	West	West end of Argo Is. - oceanside	
	Mar. 31 Aug. 5	120	60	.53	.61	West	West end of Long Is. - oceanside	
	Mar. 31 Aug. 5	120	60	.53	.61	West	West end of Long Is. - oceanside	
	Mar. 31 Aug. 5	120	60	.53	.61	West	West end of Long Is. - oceanside	
	Mar. 31 Aug. 5	120	50	.39	.45	West	East end of Stump Is. - oceans	
	Mar. 31 Aug. 8	120	80.5	.61	.71	West	East SE of Kavcarak Pt.	

DRIFTER SPOT COMPARISONS AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarfak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFTER LOCATION	DRIFTER	DAY'S ADRIFFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 15	7.5 mi. true Mar. 31	Aug. 3	126	48	.38	.41	West	W. Dock extension - prudhoe Bay		
	N. of Tigvarfak Island									
	Mar. 31	Aug. 5	128	61	.47	.55	West	East end of Long Is. - oceanside		
	Mar. 31	Aug. 4	127	53	.41	.48	West	1.5 mi. West of W. Dock in prudhoe Bay nr. pt. McIntryre		
	Mar. 31	Aug. 12	135	204.5	1.51	1.75	West	18 km South of Cape Halkett on beach		
SS 16	8.0 mi true Mar. 31	Aug. 5	128	22.7	.17	.2	East	Mid Mikkelson Bay		
	N. of Tigvarfak Island									
	Aug. 9	132	74	.56	.64	West	SE of Beechy Pt			
	Sep. 10	164	104	.63	.73	West	Highest crest of Spy Island (deposited during 8/29 storm			
	Aug. 17	140	58	.41	.47	East	2.5 km East of Brownlow Pt. on Split			

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFT TIME	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION	
SS 17	8.5 mi true N of Tigvarlak Island	Mar. 31	Aug. 5	128	194.5	1.51	1.75	West	4 mi West of Saktuna Pt.
		Mar. 31	Aug. 5	128	69	.53	.62	West	West of W. half of Long Island - oceanside
		Mar. 31	Aug. 5	128	57	.44	.51	West	Egg Island Chan- nel Is. oceanside
		Mar. 31	Aug. 5	128	14	.1	.12	East	N. Tigvarlak Is. near beginning of Split
		Mar. 31	Aug. 17	140	200	1.42	1.65	West	15 km S of Cape Halkett
		Mar. 31	Aug. 13	136	61	.44	.51	East	Middle oceanside of Spit Island east of Brownlow Point.

DRIFTER SPEED COMPARISON AND DATA - 1980

SS = Stefansson Sound - releases due north  
of Tigrayak Island

BP = releases due north of  
Beechey Point  
m = meter  
mi = mile

CG = releases by Coast  
Guard  
km = kilometer  
cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT	DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 18	9.0 mi true N of Tigrayak Island	Mar. 31	Aug. 5	128	8	.06	.07	.07	[ast	Stockton Island - oceanside
		Mar. 31	Aug. 5	128	56	.43	.5	.5	West	East end of Stump -Oceanside
		Mar. 31	Aug. 5	128	28	.21	.25	.25	West	Sagavanirktok River delta
		Mar. 31	Aug. 4	127	52	.4	.47	.47	West	1.5 mi West of W. Dock (near pt. McIntyre) Lagoonside
SS 19	9.5 mi true N of Tigrayak Island	Mar. 31	Aug. 5	128	78	.6	.7	.7	West	E. Island be- tween Cottle Is. and Pingok Is.
		Mar. 31	Aug. 5	128	49.5	.38	.44	.44	West	East end of Stump Is. ocean- side
		Mar. 31	Aug. 5	128	68	.53	.61	.61	West	West end W. half of Long Island - oceanside
		Mar. 31	Aug. 5	128	82	.64	.71	.71	West	On East channel of Pingok Is.
		Mar. 31	Aug. 5	128	74.5	.58	.67	.67	West	West end of Cottle Island - oceanside
		Mar. 31	Aug. 5	128	28.5	.22	.25	.25	West	Sanvanirktok R.

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	ADRIIFT DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
SS 19	9.5 mi true N of Tigvarlak Island	Mar. 31	Aug. 4	127	51.5	.4	.46	West	1.5 mi West of W. dock (near Pt. McIntyre)
		Mar. 31	Aug. 10	133	78.5	.59	.68	West	North side of Bodfish Island
		Mar. 31	Aug. 11	134	74.5	.55	.64	West	North side of Cottle Island
		Mar. 31	Aug. 10	133	78.5	.59	.68	West	North side of Bodfish Island
		Mar. 31	Aug. 10	133	78.5	.59	.68	West	North side of Bodfish Island
		Mar. 31	Aug. 6	129	56	.43	.5	East	Oceanside of Spit West of Brownlow Pt.
		Mar. 31	Jul. 30	122	116.5	.95	1.1	West	East of Thetis Island cabin oceanside

DRIFTER SPEED COMPARISON AND DATA - 1980  
SS = Stefansson Sound - releases due north  
of Tigrayak Island

BP = releases due north of  
Beechey Point  
m = meter  
mi = mile

CG = releases by Coast  
Guard  
km = kilometer  
cm = centimeter

RELEASE #	RELEASE LOCATION	RECOVERY DATE	RECOVERY DATE	DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIREC- TION	RECOVERY LOCATION
SS 20	10.0 mi true N of Tigrayak Island	Mar. 31	Aug. 5	120	23.5	.18	.21	West	Sagavanirktoq River delta
		Mar. 31	Aug. 5	128	15	.11	.13	West	North shore of Island west of Tigrayak Island
		Mar. 31	Aug. 5	128	9	.07	.08	East	West end of Stockton Island oceanside
		Mar. 31	Jul. 19	111	51	.45	.53	West	Pt. McIntyre
		Mar. 31	Aug. 9	132	73.5	.55	.64	West	SE Beechey Pt.
		Mar. 31	Jul. 25	117	115.5	.98	1.14	West	East end of Thetis Island cabin - oceanside
		Mar. 31	Aug. 13	136	62	.45	.52	East	2.5 km East of Brownlow Point

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigravlik Island

RP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DAYS ADRIFFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
CG 1	5 mi N of Reindeer Is. in open water	Jul. 7	Aug. 10	25	33	1.31	1.52	West	North side Bodfish Island
		Jul. 7	Aug. 10	25	33	1.31	1.52	West	North side Bodfish Island
		Jul. 7	Aug. 10	25	33	1.31	1.52	West	North side Bodfish Island
		Jul. 7	Aug. 11	26	31	1.19	1.37	West	North side Cottle Island
		Jul. 7	Aug. 5	20	38	1.89	2.19	West	East end Pingok Is., oceanside
		Jul. 7	Aug. 5	20	47.5	2.37	2.74	West	East end Leavitt Island
		Jul. 7	Aug. 5	20	31	1.54	1.79	West	Cottle Island - oceanside
		Jul. 7	Aug. 5	20	19	.94	1.09	West	East end West half Long Island, oceanside
		Jul. 7	Aug. 5	20	38	1.89	2.19	West	East end Pingok Is. - oceanside
		Jul. 7	Aug. 5	20	33.5	1.67	1.93	West	Cottle Island -

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvariaq Island

BP = releases due north of  
 Berchey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT TIME (DAYS)	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
CG 1	5 mi N of Reindeer Is., in open water	Jul. 7	Aug. 4	19	21	1.1	1.27	West	1.5 mi West of West dock
		Jul. 7	Aug. 5	20	120.5	6.02	6.97	West	Mouth of Salt Lake
		Jul. 7	Aug. 17	32	152	4.75	5.49	West	15 km South of Cape Halkett
		Jul. 7	Aug. 2	17	154	9.05	10.48	West	18 km South of Cape Halkett on beach
		Jul. 7	Aug. 25	40	18.5	.46	.53	West	West Dock - Prudhoe Bay
		Jul. 7	Aug. 29	14	66	4.71	5.45	West	East end of Thetis Island - oceanside
		Jul. 7	Aug. 29	14	66	4.71	5.45	West	East end of Thetis Island - oceanside
		Jul. 7	Aug. 9	24	66.5	2.77	3.2	West	Thetis Island
		Jul. 7	Aug. 10	25	33	1.31	1.52	West	Woodfish Island - northside

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tiquarlak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DRIFTER	LOCATION	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVER LOCATION
CG 1	5 mi N of Reindeer Is. in open water	Jul. 7	Aug. 10	25	33	1.31	1.52	West	Bodfish Island - northside	
		Jul. 7	Aug. 10	25	33	1.31	1.52	West	Bodfish Island - northside	
		Jul. 7	Aug. 11	26	31	1.19	1.37	West	Cottle Island - northside	
CG 2	10 mi N of Reindeer Is. in open water	Jul. 7	Aug. 5	20	32	1.59	1.85	West	Cottle Island - oceanside	
		Jul. 7	Aug. 5	20	36.5	1.82	2.11	West	West end Bertoncini Is. oceanside	
		Jul. 7	Aug. 5	20	23.5	1.17	1.35	West	East end West half of Long Is. - oceanside	
		Jul. 7	Aug. 5	20	23.5	1.17	1.35	West	East end West half of Long Is. - oceanside	
		Jul. 7	Aug. 5	20	39	1.94	2.25	West	End end of Pingtok Is. - oceanside	
		Jul. 7	Aug. 5	20	30.5	1.52	1.76	West	Cottle Island	
		Jul. 7	Aug. 5	20	30	1.09	2.19	East	Sayvanirktok River	

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Tigvariak Island

DP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
 km = kilometer  
 cm = centimeter

RELEASE #	RELEASE LOCATION	RELEASE DATE	RECOVERY DATE	DRIFT	DAYS	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
CG 2	10 mi N of Reindeer Is. in open water	Jul. 7	Jul. 20	5	26.5	5.29	6.13	West	Half up East side of West Dock	
		Jul. 7	Aug. 4	19	28.5	1.5	1.73	West	1.5 mi West of West Dock	
		Jul. 7	Aug. 4	19	28.5	1.5	1.73	West	1.5 mi West of West Dock	
		Jul. 7	Aug. 1	16	152	9.5	10.99	West	18 km South of Cape Halkett on beach	
		Jul. 7	Jul. 27	12	65	5.41	6.26	West	East end Thetis, oceanside	
		Jul. 7	Sep. 10	56	58	1.03	1.19	West	Highest crest of Spy Is. (deposited during 8/29 storm)	

DRIFTER SPEED COMPARISON AND DATA - 1980  
 SS = Stefansson Sound - releases due north  
 of Igvariaak Island

BP = releases due north of  
 Beechey Point  
 m = meter  
 mi = mile

CG = releases by Coast  
 Guard  
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 cm = centimeter

RELEASE #	RELEASE DATE	RECOVERY DATE	DAYS ADRIFT	DISTANCE (KM)	RATE (KM/DAY)	RATE (CM/SEC)	DIRECTION	RECOVERY LOCATION
CG 3	15 mi N of Reindeer Is. in open water	Jul. 7 Aug. 30	55	207	3.76	4.35	East	Shoreline, Komokuk Beach, Yukon (Dewline Station)
CG 4	20 mi N of Reindeer Is. in open water	Jul. 7 Aug. 28	43	56	1.3	1.5	West	Beach on lagoon side of Spit at West end of Pingok Island
CG 5	25 mi N of Reindeer Is. in open water	Jul. 7 Aug. 10	25	178.5	7.13	8.26	West	Beach at Camp Lonely, 153° 10' West 70° 55' North

